

### REMARKS

The Office Action mailed August 5, 2009 has been reviewed and carefully considered. No new matter has been added.

Claims 1 and 9 have been amended. Claims 1-25 are pending.

Initially, the Applicants gratefully acknowledge the Examiner's indication of allowable subject matter. In particular, Claims 2, 13, 15, and 22 have been objected to and would be allowable re-written to include the limitations of the base claim and any intervening claims, with the preceding as it applies to Claims 13, 15, and 22, being contingent upon the rejection of Claims 9-25 under 35 U.S.C. §101 being overcome).

Claims 9-25 stand rejected under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention. As set forth in *In re Bilski*, 88 USPQ.2d 1385 (Fed. Cir. 2008), the proper test for determining patent-eligibility of process claims is the machine-or-transformation test. The machine-or-transformation test is a two-branched inquiry. An applicant may show that a process claim satisfies the statute (35 U.S.C. §101) either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. Accordingly, independent Claim 9 has been amended to now recite, *inter alia*, "In a video decoder, a method for decoding video signal data for an image block" (emphasis added). Thus, Claim 9 now recites a machine, namely a video decoder, thus tying the subject matter of claim 9 to the statutory category of machine. Accordingly, Claim 9 is now believed to fall within one of the four categories of invention and be in compliance with 35 U.S.C. §101. Claims 10-25 depend from Claim 9 and are thus believed to satisfy 35 U.S.C. §101 for at least the same reasons as asserted above for Claim 9. Reconsideration of the rejection is respectfully requested.

Claims 1, 3-10, 12, 14, 16-19, and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,081,551 to Ettoh (hereinafter "Ettoh"). Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ettoh in view of U.S. Patent No. 6,097,842 to Suzuki et al. (hereinafter "Suzuki"). Claims 20 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ettoh in view of U.S. Patent No. 5,089,889 to Sugiyama (hereinafter "Sugiyama").

As noted above, independent Claims 1 and 9 have been amended. Support for the amendments may be found at least at page 5, lines 31 to page 6, line 4, page 7, lines 11-14, and Figure 3 of the Applicant's specification.

It is respectfully asserted that none of the cited references teach or suggest “a reference picture weighting factor unit responsive to the relative positioning between the image block and first and second reference pictures, the reference picture weighting factor unit having an output for determining respective implicit weighting factors for the first and second reference pictures based on respective distances of the image block to the first and second reference pictures”, as now recited in independent Claim 1.

Further, it is respectfully asserted that none of the cited references teach or suggest “determining implicit weighting factors responsive to the relative positioning between the image block and first and second reference pictures indicated by the plurality of reference picture indices based on respective distances of the image block to the first and second reference pictures”, as now recited in independent Claim 9.

Against the preceding limitations of Claims 1 and 9, the Examiner has cited column 3, lines 56-67 (first cited portion) and column 7, lines 8-23 (second cited portion) of Etoh. The Applicants respectfully disagree with the Examiner’s reading of Etoh.

For example, column 3, lines 56 to column 4, line 3 (inclusive of the first cited portion of) of Etoh disclose the following (emphasis added):

According to the invention, there is also provided an image decoding apparatus comprising: decoding means for decoding encoded data input from the image encoding apparatus; a frame memory for storing a reference image; weighted motion-compensation means for, based on the motion vector decoded by the decoding means, extracting from the reference image stored in the frame memory an area of a prescribed size which is wider than the prescribed block size and which contains an area corresponding to each block of a predicted image, and for **creating a predicted image by applying a predetermined weight to each of pixels in the wider area** and by using the weighted pixels of the wider area; and image creating means for creating an output image based on the predicted image and the residual signal decoded by the decoding means.

It is clear that the first cited portion of Etoh makes not mention whatsoever of how the predetermined weight is determined and, hence, certainly cannot be said to teach or suggest

that such weight is determined “based on respective distances of the image block to the first and second reference pictures” as recited in Claims 1 and 9.

Column 7, lines 8-23 (the second cited portion) of Etoh disclose the following (emphasis added):

On the other hand, the image decoding apparatus of FIG. 2 comprises: a DMUX 15 for taking as an input the bit stream output from the image encoding apparatus of FIG. 1, and for demultiplexing it into the image signal (usually, a residual signal) and the multiplexed motion vector; a Huffman decoder 16 for decoding the demultiplexed image signal; an inverse quantizer 7 for inverse-quantizing the decoded signal; an inverse DCT 8 for inverse-discrete-cosine-transforming the inverse-quantized signal; a multiplexed motion vector decoder 29 for decoding the multiplexed motion vector, demultiplexed by the DMUX 15, into the motion vector and selection control bit; a weighted motion compensator 22c for creating a predicted image from a reference image by using the decoded motion vector; and a predicted-image memory 25 for storing the thus created predicted image.

Similar to the first cited portion, it is clear that the second cited portion of Etoh makes no mention whatsoever of how the predetermined weight is determined and, hence, certainly cannot be said to teach or suggest that such weight is determined “based on respective distances of the image block to the first and second reference pictures” as recited in Claims 1 and 9. The cited portion simply discloses that weighted motion compensator 22c creates a predicted image from a reference image using a decoded motion vector - as is customary, while implying that the resultant predicted image is weighted (by describing the motion compensator 22c as “weighted”) without any mention as to how any such corresponding weights are determined.

Hence, Etoh fails to teach or suggest all of the limitations recited in Claims 1 and 9.

Accordingly, Claims 1 and 9 are patentably distinct and non-obvious over Etoh for at least the reasons set forth above. Moreover, the remaining references do not cure the deficiencies of Etoh and are silent with respect to the above-recited limitations. That is, none of

the cited references, either taken singly or in any combination, teach or suggest the above recited limitations of Claims 1 and 9.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art” (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Accordingly, Claims 1 and 9 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above.

“If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious” (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 2-8 depend from Claim 1 or a claim which itself is dependent from Claim 1 and, thus, include all the limitations of Claim 1. Claims 10-25 depend from Claim 9 or a claim which itself is dependent from Claim 9 and thus include all the limitations of Claim 9. Accordingly, Claims 2-8 and 10-25 are patentably distinct and non-obvious over the cited reference for at least the reasons set forth above with respect to Claims 1 and 9, respectively.

Thus, reconsideration of the rejections is respectfully requested.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of August 5, 2009 be withdrawn, that pending claims 1-25 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

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**PATENT**

**PU020436**

No fee is believed due with regard to the filing of this amendment. However, if a fee is due, please charge Deposit Account No. 07-0832.

Respectfully submitted,

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